## WHAT IS CLAIMED IS:

- 1. An isolated polynucleotide comprising a polynucleotide having at least 95% identity to a member selected from the group consisting of:
  - (a) a polynucleotide encoding a polypeptide comprising amino acid 1 to 69 of SEQ ID NO:2;
  - (b) a polynucleotide encoding a polypeptide comprising mino acid 1 to amino acid 69 set forth in SEQ ID NO:4;
  - (c) a polynucleotide encoding a polypeptide comprising amino acid 1 to amino acid 74 set forth in SEQ ID NO:6;
  - (d) a polynucleotide which is complementary to the polynucleotide of (a), (b) or (c); and
  - (e) a polynucleotide comprising at least 15 consecutive bases of the polynucleotide of (a), (b), (c) or (d).
- 2. The polynucleotide of Claim 1 wherein the polynucleotide is DNA.
- 3. The polynucleotide of Claim 1 wherein the polynucleotide is RNA.
- 4. The polynucleotide of Claim 2 which encodes the polypeptide comprising amino acid 1 to 69 of SEQ ID NO:2.
- 5. The polynucleotide of Claim 2 which encodes the polypeptide comprising amino acid 1 to 69 of SEQ ID NO:4.
- 6. The polynucleotide of Claim 2 which encodes the polypeptide comprising amino acid 1 to 74 of SEQ ID NO:6.
- 7. A recombinant vector comprising inserting a polynucleotide according to Claim 1, wherein said member is selected from (a), (b) and (c) and said polynucleotide is DNA.
- 8. A recombinant host cell comprising inserting a polynucleotide according to Claim 1, wherein said member is selected from (a), (b) and (c) and said polynucleotide is DNA.
- 9. A process for producing a polypeptide comprising expressing a polypeptide encoded by the host cell of Claim 9 and recovering said polypeptide.
- 10. An isolated polynucleotide according to Claim 1, comprising a polynucleotide having at least 95% identity to a member selected from the group consisting of:
  - (a) a polynucleotide comprising nucleotides 106 to 312 of SEQ ID NO:1;
  - (b) a polynucleotide comprising nucleotides 103 to 309 of SEQ ID NO:3;
  - (c) a polynucleotide comprising nucleotides 109 to 330 of SEQ ID NO:5;

- (d) a polynucleotide which is complementary to the polynucleotide of (a), (b), or (c); and
- (e) a polynucleotide comprising at least 15 consecutive bases of the polynucleotide of (a), (b), (c), or (d).
- 11. An isolated polynucleotide comprising a polypeptide having at least 95% identity to a member selected from the group consisting of:
  - (a) a polynucleotide which encodes a mature polypeptide having the amino acid sequence expressed by the human cDNA contained in ATCC Deposit No. 97401;
  - (b) a polynucleotide which encodes a mature polypeptide having the amino acid sequence expressed by the human cDNA contained in ATCC Deposit No. 97402;
  - (c) a polynucleotide which encodes a mature polypeptide having the amino acid sequence expressed by the human cDNA contained in ATCC Deposit No. 97403;
  - (d) a polynucleotide which is complementary to the polynucleotide of (a), (b) or (c); and
  - (e) a polynucleotide comprising at least 15 consecutive bases of the polynucleotide of (a), (b), (c) or (d).
- 12. A recombinant vector comprising inserting a polynucleotide according to Claim 11, wherein said member is selected from (a), (b) and (c) and said polynucleotide is DNA.
- 13. A recombinant host cell comprising inserting a polynucleotide according to Claim 11, wherein said member is selected from (a), (b) and (c) and said polynucleotide is DNA.
- 14. A process for producing a polypeptide comprising expressing a polypeptide encoded by the host cell of Claim 13 and recovering said polypeptide.
- 15. A polypeptide comprising a member selected from the group consisting of:
  - (a) A polypeptide comprising amino acid 1 to 69 of SEQ ID NO:2;
  - (b) A polypeptide comprising amino acid 1 to 69 of SEQ ID NO:4;
  - (c) A polypeptide comprising amino acid 1 to 74 of SEQ ID NO:6;
  - (d) A polypeptide which is at least 95% identical to the polypeptide of (a), (b) or (c).
- 16. The polypeptide of Claim 15 wherein the polypeptide consists of amino acid 1 to amino acid 69 of SEQ ID NO2.

- 17. The polypeptide of Claim 15 wherein the polypeptide consists of amino acid 1 to amino acid 69 of SEQ ID NO:4.
- 18. The polypeptide of Claim 15 wherein the polypeptide consists of amino acid 1 to amino acid 74 of SEQ ID NO:6.
- 19. A compound which inhibits activation of the polypeptide of Claim 15.
- 20. An antibody against a polypeptide of Claim 15.
- 21. An antagonist against the polypeptide of Claim 15.
- 22. An isolated polypeptide comprising:
  - (a) A mature polypeptide encoded by a polynucleotide which is at least 95% identical to a polynucleotide sequence which encodes a mature polypeptide having the amino acid sequence expressed by the human cDNA contained in ATCC Deposit No. 97401;
  - (b) A mature polypeptide encoded by a polynucleotide which is at least 95% identical to a polynucleotide sequence which encodes a mature polypeptide having the amino acid sequence expressed by the human cDNA contained in ATCC Deposit No. 97402;
  - (c) A mature polypeptide encoded by a polynucleotide which is at least 95% identical to a polynucleotide sequence which encodes a mature polypeptide having the amino acid sequence expressed by the human cDNA contained in ATCC Deposit No. 97403.
- 23. A polypeptide according to Claim 22, wherein said member is (a).
- 24. A polynucleotide according to Claim 22, wherein said member is (b).
- 25. A polypeptide according to Claim 22, wherein said member is (c).
- 26. A method for the treatment of a patient having need of hESF I, II or III comprising: administering to the patient a therapeutically effective amount of the polypeptide of Claim 15.
- 27. The method of Claim 26 wherein said therapeutically effective amount of the polypeptide is administered by providing to the patient DNA encoding said polypeptide and expressing said polypeptide *in vivo*.
- 28. A method for the treatment of a patient having need to inhibit a hESF I, II or III polypeptide comprising: administering to the patient a therapeutically effective amount of the compound of Claim 15.

- 29. A process for diagnosing a disease or a susceptibility to a disease related to an underexpression of the polypeptide of Claim 15 comprising: determining a mutation in a nucleic acid sequence encoding said polypeptide.
- **30.** A diagnostic process comprising: analyzing for the presence of the polypeptide of Claim 15 in a sample derived from a host.
- 31. A method for identifying compounds which bind to and inhibit activation of the polypeptide of Claim 15 comprising: contacting a cell expressing on the surface thereof a receptor for the polypeptide, said receptor being associated with a second component capable of providing a detectable signal in response to the binding of a compound to said receptor, with an analytically detectable hESF I, II or III polypeptide and a compound under conditions to permit binding to the receptor; and

determining whether the compound binds to and inhibits the receptor by detecting the absence of a signal generated from the interaction of the hEST I, II or III with the receptor.

- 32. A method according to Claim 31, wherein said member is (a).
- 33. A method according to Claim 31, wherein said member is (b).
- 34. A method according to Claim 31, wherein said member is (c).